

## **12 KAR 4:100. Slowly released nutrients.**

RELATES TO: KRS 250.366(7), (17), (18)

STATUTORY AUTHORITY: KRS 250.421

NECESSITY, FUNCTION, AND CONFORMITY: To interpret the fertilizer law as it relates to the proper labeling of slowly released nutrients.

Section 1. No fertilizer labeling shall bear a statement that connotes or implies that certain plant nutrients contained in a fertilizer are released slowly over a period of time, unless the nutrient or nutrients are identified and guaranteed at a level of at least fifteen (15) percent of the total guarantee for that nutrient(s).

Section 2. Types of products with slow release properties recognized are:

- (1) Water insoluble, such as natural organics, urea form materials, urea-formaldehyde products, isobutylidene diurea, oxamide, etc.;
- (2) Coated slow release, such as sulfur coated urea and other encapsulated soluble fertilizers;
- (3) Occluded slow release, where fertilizers or fertilizer materials are mixed with waxes, resins, or other inert materials and formed into particles; and
- (4) Products containing water soluble slowly available nitrogen such as urea-formaldehyde products, methylenediurea (MDU), dimethylenetriurea (DMTU), dicyanodiamide (DCD), urea-triazone solutions, etc.

The terms, "water insoluble, coated slow release, slow release, controlled release, slowly available water soluble, and occluded slow release" are accepted as descriptive of these products, provided the manufacturer can show a testing program substantiating the claim (testing under guidance of Kentucky Agricultural Experiment Station personnel or a recognized reputable researcher acceptable to the director). A laboratory procedure, acceptable to the director for evaluating the release characteristics of the product(s) shall also be provided by the manufacturer.

Section 3. If an amount of nitrogen is designated as organic, then the water insoluble nitrogen or the slow release nitrogen guarantee shall not be less than sixty (60) percent of the nitrogen so designated. Coated urea shall not be included in meeting the sixty (60) percent requirement.

Section 4. Until more appropriate methods are developed, AOAC International method 970.04 is to be used to confirm the coated slow release and occluded slow release nutrients and others whose slow release characteristics depend on particle size. AOAC International method 945.01 shall be used to determine the water insoluble nitrogen of organic materials. AOAC International methods 970.04 and 945.01 are in Official Methods of Analysis 15th Edition (1990) and are hereby incorporated by reference. This material is available for inspection and copying at 103 Regulatory Services Building, University of Kentucky, Lexington, Kentucky, during regular business hours of 8 a.m. to 5 p.m., Monday through Friday. (11 Ky.R. 510; eff. 11-13-84; Am. 21 Ky.R. 452; 1023; eff. 9-28-94.)